H05G

X-RAY TECHNIQUE (apparatus for radiation diagnosis A61B 6/00; X-ray therapy A61N; testing by X-rays G01N; apparatus for X-ray photography G03B; filters, conversion screens, microscopes G21K; X-ray tubes H01J 35/00; TV systems having X-ray input H04N 5/321)

References

Limiting references

This place does not cover:

Apparatus for radiation diagnosis	A61B 6/00
X-ray therapy	A61N
Testing by X-rays	G01N
Apparatus for X-ray photography	G03B
Filters, conversion screens, microscopes	G21K
X-ray tubes	H01J 35/00
TV systems having X-ray input	H04N 5/32

H05G 1/00

X-ray apparatus involving X-ray tubes; circuits therefor

Definition statement

This place covers:

Devices intended to be used in conjunction with X-ray tubes and containing technical features relating to the operation of the X-ray tube, such as providing power, controlling the operation of the tube itself, cooling the tube.

References

Limiting references

This place does not cover:

Computerised tomographs	A61B 6/03
Positioning of patients; Tiltable beds or the like	A61B 6/04

Informative references

Attention is drawn to the following places, which may be of interest for search:

Measuring x-ray intensity	G01T
Regulating supply in general	G05F
Measuring electric values	H01R

H05G 1/04

Mounting the X-ray tube within a closed housing

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

X-ray windows	H01J 5/18

H05G 2/00

Apparatus or processes specially adapted for producing X-rays, not involving X-ray tubes, e.g. involving generation of a plasma (X-ray lasers H01S 4/00; plasma technique in general H05H)

Definition statement

This place covers:

Apparatus or processes for producing X-rays which are not x-ray tubes.

References

Limiting references

This place does not cover:

Plasma technique in general	H05H

Informative references

Attention is drawn to the following places, which may be of interest for search:

X-ray windows	H01J 5/18
X-ray Lasers	H01S 4/00
Undulator or wiggler structures	H05H 7/04

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

X-rays	Electromagnetic radiation with energies in the range of atomic inner core shell binding energies. This energy range starts at energies of about 30 eV (e.g. Li-K or Na-LIII edges), and extends up to several hundred keV.
X-ray tube	Vacuum tube in which electrons hit a target (anode) in order to produce electromagnetic radiation caused by the deceleration of electrons (Bremsstrahlung) or a recombination of inner core holes (characteristic radiation).

H05G 2/001

{X-ray radiation generated from plasma (plasma for generation of electrons to be accelerated towards an anode H01J 35/00)}

Definition statement

This place covers:

Generation of recombination radiation in hot plasma, interaction of laser radiation with highly charged ions for harmonics generation.

Devices in which a plasma is used for generation of electrons to be accelerated towards an anode	H01J 35/00

H05G 2/003

{being produced from a liquid or gas}

Definition statement

This place covers:

Generation of radiation from plasma being produced from material which is provided in a non-bulk state, including liquids which solidify (in clusters or frozen droplets) in the vacuum chamber, e.g. after passing the liquid through a nozzle; discharge plasma sources;Including Sn or Li sources where the material to be excited is evaporated or molten before excitation to plasma